AMCOM CASL

INSTRUCTIONS & ATTACHMENTS

LATEST UPDATE: OCTOBER 1999

INDEX

1. CASL LISTINGS

The CASL consists of six listings and this set of instructions. The available listings are as follows:

SAR INFORMATION

SPARE PARTS PROJECTIONS

OVERHAUL PROGRAM PROJECTIONS

FLIGHT SAFETY PARTS LIST (AVIATION)

SPIRAL BEVEL GEAR LIST

MAJOR ITEMS/SERVICES

2. ABBREVIATIONS AND DEFINITIONS

Term	Meaning
AMC	Acquisition Method Code. The competitive acquisition status of the item.
AMRC	Acquisition Method Reason Code. A two-digit alpha-numeric code consisting of the Acquisition Method Code (1st digit) and the Acquisition Method Suffix Code (2nd digit). See Attachment I or definition of specific codes.
AMSC	Acquisition Method Suffix Code. The technical reason for the competitive status.
APPROVED SOURCE	Source currently approved for a part, identified by Contractor and Government Entity Code.
BOB PROGRAM	Buy or Borrow Program. See paragraph 7 for details.
CAGE	Contractor and Government Entity. See paragraph 9.f and Attachment III, DD Form 2051.
CASL	Competition Advocate's Shopping List.
CMO	Competition Management Office.
CBD	Commerce Business Daily.
CDAL	Competitive Data Availability List. This listing includes all items projected in the CASL for which adequate technical data currently exists to support a competitive procurement. It is noted that for all items with AMRC codes other than 1G or 2G, contractors will need to become approved sources in accordance with the SAR procedures specified within these instructions prior to being considered for a contract award.
DCA	Design Control Activity. The Government or private organization that possesses the master design documents and has the authority to change them.
DLA	Defense Logistics Agency.
DLR	Depot Level Repair.
DLSC	Defense Logistics Services Center.
DMWR	Depot Maintenance Work Requirement. Contractors bidding for overhaul contracts must bid to the specific DMWR for the item to be overhauled.
DOD	Department of Defense

FAA/PMA	Federal Aviation Administration/Parts Manufacturer Approval.
FAR	Federal Acquisition Regulation.
FAT	First Article Test requirement.
FOIA	Freedom of Information Act.
FSC	Federal Supply Class.
FSP	Flight Safety Part.
GFE	Government Furnished Equipment.
IMMC	Integrated Materiel Management Center.
MFR	Manufacturer. An individual, activity, or organization that performs the physical fabrication processes that produce the actual part or items of supply. The manufacturer must produce a significant portion of the part in-house. The actual manufacturer need not be the Design Control Activity.
MIL-I-45208	Inspection Systems Requirements.
MIL-Q-9858	Quality Program Requirements.
MRB	Materiel Review Board.
NICP	National Inventory Control Point.
Non-Manufacturer	An individual, activity, or organization not having the capability to manufacture specific parts but who contracts for a specific part, such as a dealer.
NSN	National Stock Number.
OEM	Original Equipment Manufacturer.
PCO	Procuring Contracting Officer
P/N	Part number of item.
QE-STD-1	Quality Engineering Standard 1. See Attachment X.
QPL	Qualified Products List.
Recoverability Codes	Lowest maintenance level with capability to perform complete repair (all authorized maintenance functions). See Attachment XI for explanation of recoverability codes.
SAR	Source Approval Request.

STDP	Spares Technical Data Package.
TR	Test Report
TEST STD 1	Engineering Test Standard 1.
U.S.A.	U.S. Army Aviation and Missile Command

3. POLICY REGARDING MAINTENANCE AND OVERHAUL

a. The level of competition for an overhaul requirement will depend upon the availability of Government owned technical data in the form of an approved Depot Maintenance Work Requirement (DMWR).

b. When an approved DMWR has been designated by the Integrated Materiel Management Center (IMMC) as suitable for full and open competition, offers from all sources will be accepted. These offers must be based on the requirements of the approved DMWR. The contracting officer shall make a responsibility determination in accordance with the provisions of FAR 9.1, assuring that the source actually has possession of, or access to, the facilities and equipment to perform the overhaul, as required by the approved DMWR. A thorough pre-award survey is generally the basis for a responsibility determination on contractors submitting offers.

c. When an approved DMWR is not available, or has not been designated as suitable for full and open competition, the Maintenance Directorate will initiate action to develop an approved DMWR to ensure competition in the future. The non-availability of a DMWR will not stop contract award. Competition will normally be limited to the prime contractor, the actual manufacturer, any contractor who can prove he has previously overhauled the same part number and can certify he has the legal right to use the overhaul data, or any contractor who can certify he has been given the legal right to use the overhaul data developed by the previously mentioned sources. The actual design manufacturer is defined as a source whom the prime contractor has contracted to design and manufacture a specific part or assembly.

d. The prime contractor and/or the actual design manufacturer generally owns the proprietary overhaul data which has been compiled from the experience and knowledge gained through design and overhaul of the part. For this reason, the sources mentioned above are qualified to overhaul a specific part or assembly when no approved DMWR is available, while an alternatively approved spare part manufacturer is not. Alternatively approved spare part manufacturers will become qualified for overhaul if they can show that they have the legal right to use the overhaul data, or if an approved DMWR, designated by the IMMC as suitable for full and open competition, is available.

e. When a contractor has the legal right to use a prime contractor's or actual design manufacturer's overhaul data, he will be required to provide proof that he has the overhaul data and to certify that he has the legal right to use the data. These certifications will be reviewed on a case-by-case basis at the time of solicitation. The certifications should be submitted to the contracting officer.

f. An urgent requirement for Depot Level Repair (DLR) will not stop contract award. Competition will be limited to the prime contractor, the actual manufacturer of the part or assembly, and previously approved sources. The Statement of Urgency supporting the requirement will state, as a minimum, the urgent quantity information, date needed, date of first requirement, impact on requirer if delay is incurred in initiating contract action, and when a competitive solicitation will be available.

g. An unstable configuration will not stop contract award. Competition will be limited to the prime contractor or the actual manufacturer of the part or assembly. The changes that impact functional and physical configuration not verified and approved by the IMMC will require the item to be returned to the

prime contractor/actual design manufacturer who owns overhaul data compiled from experience and knowledge gained through design and overhaul of the part. Once approved for a configuration change, all documentation will be updated to reflect design changes concurrent with implementation of the change.

4. POLICY REGARDING SOURCE APPROVAL REQUESTS (SARs)

a. Each SAR package shall be limited to one (1) item or assembly per request, except for CATEGORY I. However, for assemblies that contain multiple procurable piece parts, a separate SAR package does not need to be submitted for each procurable piece part if all information has been provided with the assembly SAR. Submit SARs to the following address:

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-RD-AE-I-C-F
Redstone Arsenal, Al 35898-5000
(256) 313-4909 / Fax (256) 313-4923

NOTE: *Since a government contractor may have access to your company's data, the following agreement should be completed and submitted as part of the SAR Package:*

AGREEMENT

Exchange of Proprietary/Limited Rights Data

Between

«Company»

And

Avion, Incorporated

Avion, Inc., operating as a contractor to the U.S. Army Aviation and Missile Command, may require access to data in the possession of «Company» or that is considered to be proprietary. It is agreed:

«Company» has no obligation to supply proprietary information under this agreement.

For data that is provided, Avion, Inc. shall take all necessary steps to preserve proprietary information in confidence. Access to proprietary information shall be restricted to only those employees which have a need to know and who have been advised of all restrictions regarding disclosure and use.

Avion, Inc shall use the proprietary information for the sole purpose of providing support to the U.S. Army Aviation and Missile Command relative to the Flight Safety Parts Program / testing and inspection of critical parts and technical review of Source Approval Requests.

All information received shall remain the property of «Company» and shall be returned to «Company» upon request.

Avion, Inc. will not disclose technical data to any country, foreign national, or firm (foreign or domestic).

No classified data will be requested by Avion, Inc. or provided by «Company» under the terms of this agreement.

This agreement will be effective upon the date of signature by «Company» and shall extend for a three-year period from that date.

Avion, Inc.	**«Company»**
Signature: _____	Signature: _____
Typed or Printed Name: Gary W. Donald_____	Typed or Printed Name: _____
Title: President_____	Title: _____
Date: _____	Date: _____

b. Complete Documentation. Your request must be complete in accordance with the stated requirements. If your SAR package is incomplete, you will be notified by return letter. Missing information will be identified, and you will be given 45 days to respond to our request for additional information. If no response is received within 45 days, the SAR will be closed. During the review process, you may be requested to furnish additional information, testing, special licenses, samples, or on-site inspection. Approval cannot be guaranteed.

c. Source Approval Request (SAR) Format. All SARs must be organized in the order set forth in paragraph 6, SOURCE APPROVAL REQUEST REQUIREMENTS, as clarified in paragraph 6.r. Do not assemble the SAR in a binder: it takes up too much file space and usually doesn't fit in the file cabinet. A table of contents should be included. This format will greatly aid our staff in evaluating your request.

d. Surplus Material. These instructions do not apply to surplus offers. Surplus offers may only be quoted when authorized in response to a specific government solicitation.

e. Subcontractors/Vendors. If you are a manufacturer who subcontracts part of the work, your request for source approval must provide the names, addresses, Contractor and Government Entity (CAGE) codes and telephone numbers of all subcontractors or vendors. You must also specify the part of the work to be done by each subcontractor and the part of the work you will do yourself. For controlled source parts, documentation from the subcontractor(s) must be included which indicates a willingness to perform the identified tasks. If you apply under equivalency, this information is required for both the qualification part and the equivalent part. For component pieces, stock materials, and Military Standard parts, prime contractor or Government Qualified Products list approval is sufficient. For flight safety part critical characteristic processes, subcontractors and vendors must be approved sources.

f. Non-manufacturers. If you are not the manufacturer of the item, the actual manufacturer must be an approved source. Your request should identify you as a non-manufacturing source, and should provide the name, address, CAGE code, and telephone number of the approved manufacturer. Documentation from your vendor must be included which indicates his willingness to perform the identified tasks on controlled source parts. Should you wish to use a source which has not been previously approved, a complete SAR package for that manufacturer must be submitted for the item.

g. Parts on Active Solicitation. We recommend that SARs be submitted based on the technical information in the CASL package. Due to time constraint's and lead times involved, cannot guarantee expedited processing of SARs submitted in response to a solicitation announcement in the Commerce Business Daily (CBD). All SARs will be processed in the order received. You will be afforded the opportunity (if approved) to bid on solicitations subsequent to your approval.

NOTE - Policy is that a proposed award will not be delayed to accommodate processing a SAR submitted in response to a CBD announcement. Once a solicitation appears in the CBD, there is not normally enough time to process your SAR for the current solicitation. The contracting officer will not delay a proposed award to provide a potential offeror an opportunity to demonstrate his ability to meet the standards specified for qualification (see FAR 9.202(e)). However, you may always request a solicitation from the buyer. If your business decision is to proceed with an offer, notify the buyer that you are also submitting a SAR.

h. Parts Not on Active Solicitation. You may submit a SAR on any item managed by, whether or not it currently appears in the Competition Advocate's Shopping List (CASL).

i. Notification of Approval/Disapproval. If approved subsequent to review of your SAR, you will receive a letter from stating that you are approved and that your firm's name and Cage code have been added to the Spares Technical Data Package (STDP) for that part. If disapproved, you will be furnished an explanation of the basis of the disapproval.

j. Flight Safety Parts Requiring Engineering Testing. The U.S. Army's policy is to procure Flight Safety Parts (FSPs) which require engineering testing only from sources whose parts have satisfied the engineering test requirement. To become an eligible source for an FSP requiring engineering testing, a firm must provide written documentation that it has met the engineering test requirement. Untested sources who have delivered the part under an contract and sources currently on contract will be tested by the Government, unless it is determined to not be in the best interest of the Government. If the testing is successfully completed, the company will be eligible for future contracts for the tested part. On future contracts, contractors are responsible for all costs associated with testing and evaluation, except where the criteria, established in FAR 9.204(a)(2), are satisfied for small business concerns.

k. Performance Items. Items that require qualification testing require that you prove that your product will meet our performance requirements prior to being approved and allowed to bid on that item.

l. Data required for submittal. Data submitted must be OEM approved, and you must use the same configuration/version that specifies in the STDP. AMCOM does not breakout parts with missing or proprietary data.

m. Evaluation. A requirements validation and economic analysis will be performed upon receipt of a SAR to determine if it is in the Government's best interest to proceed. If the validation reveals no anticipated procurement activity in the current fiscal year or in either of the two succeeding fiscal years, the SAR will be closed and you will be notified that no further action will be taken. If the economic analysis indicates no tangible savings, we will advise you that your SAR is being placed in a hold status. Items with probable cost savings will be processed ahead of those without potential savings.

n. Castings and Forgings. If a part requires a casting or forging, the casting or forging shall be obtained from an approved source. If an additional source wishes to be approved, it shall be done in accordance with FORG-STD-1 for forgings, or in accordance with CAST-STD-1 for castings, as specified in the STDP. This qualification must be completed prior to contract award.

o. Spiral Bevel Gears. Spiral bevel gears require that sources must have in their possession the required working and silver control master gears necessary for acceptance of production spiral bevel gears, or written documentation giving them access to those master gears. Development of "equivalent" master gears that are not coordinated/calibrated to the golden master gear held by the prime contractor is not

allowed. This action is necessary to ensure interchangeability with all mating gears.

5. SOURCE APPROVAL REQUEST (SAR) CATEGORIES

a. CATEGORY I. FULLY COMPETITIVE PARTS

Fully competitive items have an Acquisition Method Reason Code (AMRC) of 1G or 2G. No SAR is required to be placed on the bidders list, but registration in the Central Contractors Registration (CCR) is required. In addition, small business contractors may fill out 's Small Business Capability Survey (Attachment II). Contractor registration at the U.S. Army Aviation and Missile Command () utilizing the Standard Automated Bidders List (SABL) is no longer used. Contractors who conduct business, or who are interested in conducting business with the Department of Defense (DoD), will register in the CCR database through the worldwide web. The CCR web may be accessed at http://www.ccr.dlis.dla.mil. Additionally, a paper form for registration may be obtained form the DoD Commerce Information Center at 1-888-227-2423 or you may fax to (616) 961-7243.

NOTE 1 - Items which you believe should be fully competitive but which are **not** coded 1G or 2G should be brought to the Government's attention by letter. The Government will respond prior to your preparing a SAR for such items.

NOTE 2 - The inclusion of your firm on a particular mailing list does not guarantee that you will automatically receive all solicitations for the item. The solicitation mailing list will be used in accordance with FAR 14.205. However, solicitations will be furnished upon request in accordance with FAR 5.102. Offers will not be disregarded solely because the offeror was not formally solicited. You are encouraged to subscribe to the CBD to stay informed about 's current acquisitions. See paragraph 9.g.

b. CATEGORY II. ACTUAL MANUFACTURER (NON-FLIGHT SAFETY PARTS):

Items which you presently manufacture or have satisfactorily manufactured in production quantities in the last four years for the OEM, one of its subcontractors, or another Department of Defense (DOD) agency. These are controlled source items.

c. CATEGORY III. EQUIVALENCY (MANUFACTURER OF AN EQUIVALENT ITEM -- NON-FLIGHT SAFETY PART):

You will need to substantiate your manufacturing capabilities and that you have manufactured production quantities of acceptable equivalent parts for the OEM, its subcontractors, or a DOD agency in the last four years. It is acceptable to submit multiple equivalent parts to substantiate manufacture by equivalency, since a single part may not be sufficient.

d. CATEGORY IV. DEMONSTRATED ENGINEERING & MANUFACTURING CAPABILITIES:

This category includes specification and source controlled items, alternate sources for castings and forgings, items requiring engineering testing for which you cannot establish equivalency, and other items that will create a new configuration but still meet form, fit, and function of the part they are replacing. This category does not include Flight Safety Parts (FSPs). In order for an item to qualify under this category, must be able to establish test requirements with accept/reject criteria. As a potential new source, you will be required to demonstrate that you and your vendors, sub-vendors, etc., have adequate engineering expertise and manufacturing or production capabilities to manufacture, inspect, and test the component or item in accordance with all applicable drawings, process specifications, and test specifications. On site inspection of these elements may be required by the Government. Substantiation testing, witnessed by the Government, will be required to validate design integrity. You must supply samples of the part on which you seek approval (manufactured at your expense). Testing costs must generally be borne by the contractor requesting source approval. This testing may include form, fit, and function checks, endurance testing, and/or performance testing.

e. CATEGORY V. FLIGHT SAFETY PARTS (FSPs):

Items which have been designated FSPs by AMCOM. Your request under this category can be as an actual manufacturer [V(A)], or based on equivalency [V(B)]. It is acceptable to submit multiple equivalent parts to substantiate manufacture by equivalency, since a single part may not be sufficient. FSPs which require engineering testing, shall be procured only from sources whose parts have previously met the engineering test requirements.

Items which have been designated FSPs requiring Engineering Testing (see Aviation Flight Safety Parts List) by AMCOM. Your request under this category [V(C)], will require the engineering test requirements to be satisfied prior to contract award. Submit a letter that states the part you wish to become approved for. We will notify you of the testing requirements and approximate testing costs. We will also notify you of the number of sources already tested and the sources in process of being tested. If you wish to proceed, you may submit a SAR.

DEFINITIONS:

Critical Characteristics: Any feature throughout the life cycle of an FSP (such as dimension, tolerance, finish, material, assembly, manufacturing, inspection process, operation, field maintenance, or depot overhaul requirements) which if non-conforming, missing, or degraded could cause the failure or malfunction of the FSP.

Flight Safety Part (airframe): Any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause loss of or serious damage to the aircraft, and/or serious injury or death to the occupants.*

Flight Safety Part (engine): Any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause an uncommanded engine shutdown, and/or a catastrophic engine failure resulting in loss of or serious damage to the aircraft, and/or serious injury or death to the occupants.*

*Refer to Mil-STD-882B for further explanation of aircraft and personal safety hazard severity categories.

f. CATEGORY VI. FEDERAL AVIATION ADMINISTRATION/PARTS MANUFACTURER APPROVAL (FAA/PMA) CERTIFIED PARTS:

Items for which you have received certification from the FAA/PMA. The FAA/PMA certification will be reviewed to determine if it meets 's requirements for approval. This category excludes the following types of parts:

-Flight Safety Parts

-Repairable Parts

-Surplus Parts

-Engineering Testing Parts

6. SOURCE APPROVAL REQUEST (SAR) REQUIREMENTS

NOTE - Not all of these requirements apply to all categories. Refer to SAR Requirements by CASL Category, paragraph 6.r., to determine the specific requirements which apply to your SAR Category.

a. Cover Letter: A cover letter stating that you wish to become an approved source under this CASL Category for a particular part number. The letter should include:

- The Part Number (and dash number, if applicable), NSN, and nomenclature.
- Your firm's name, address, CAGE Code, telephone number, and FAX number.
- A description of your quality program (i.e., MIL-I-45208, MIL-Q-9858, ISO-9000, etc.)
- A current copy of your quality control manual only needs to be submitted initially. However, should any major changes occur, submit the current quality control manual for our records.
- Brochures should be sent with first submission only.
- Synopsis outlining your firm's capabilities, facilities, experience, and equipment list. For all equipment used in the manufacture of the qualification part, outline the accuracy, size, capability, and precision of the equipment. Should any major changes occur in your firm's capabilities, facilities, experience, or equipment list, submit the changes for our records.

b. Qualification Part Drawing: Copies of all drawings for the part showing the current configuration and the top sheet of all applicable specifications necessary to completely manufacture the qualified part.

c. Qualification Part Detailed Manufacturing Plan: A detailed manufacturing plan for the qualification part, including processes, materials, configuration, tolerances, testing, part function, and overall dimensions. Manufacturing plans must list all processes/steps in the proper sequence. Include all special processes.

d. Master Tooling Certification: Certification of possession of or access to any required master tooling, master gears, proof of calibration, and/or special tooling/test equipment current to latest drawing revision. If no master tooling is required, so state.

e. Data Collection: Certification of rights to use technical data in the format of Attachment IV, signed by a person authorized to represent your firm. If proprietary data is involved, you must supply a statement from the owner of that data that gives you the rights to specifically use that piece of data. NOTE: This also applies to the use of data the Government possesses but does not have the right to use in competitive manufacturing.

f. Qualification Part Subcontractor/Vendor List: Names, telephone numbers, CAGE codes, and addresses of all subcontractors/vendors to be used, and vendor/subcontractor part numbers, if applicable. Subcontractors/vendors used for castings, forgings, machining, and exotic materials, as well as for special processes and operations designated as critical characteristics, must be or OEM approved sources.

g. Qualification Part Shipping Document: Copies of Purchase Orders or shipping documents, and proof of acceptance of production quantities for the qualification part(s) from the OEM or another DOD agency in the last four years.

h. Equivalent Part Drawings: Copies of all drawings for the part showing the current configuration and the top sheet of all applicable specifications necessary to completely manufacture the equivalent part.

i. Equivalent Part Shipping Documents: Copies of Purchase Orders or shipping documents and proof of acceptance of production quantities for the equivalent part(s) from the OEM or another DOD agency in the last four years.

j. Comparative Analysis: Provide a detailed comparative analysis of the differences and similarities between the equivalent part(s) and the qualification part for which you are requesting approval. This analysis should include materials, configuration, tolerances, processes, testing, part function, dimensions, etc. A vague analysis is not adequate.

k. Equivalent Part Detailed Manufacturing Plan: Detailed manufacturing plan for the equivalent part, including processes, materials, configuration, tolerances, testing, part function, and overall dimensions.

Manufacturing plans must list all processes/steps in the proper sequence. Include all processes.

l. Equivalent Part Subvendor/Vendor List: Names, telephone numbers, CAGE codes, and addresses of all subcontractors/vendors used (including castings, forgings, exotic materials, machining, special processes, etc.), and vendor/subcontractor part numbers, if applicable.

m. Logistics Support Data: All new configuration parts require provisioning drawings which may be identified with your proprietary markings. For repairable parts/assemblies, complete technical data (all component drawings, specifications, and complete parts list breakdown) necessary for provisioning must be submitted with your SAR. After initial review of the SAR, you will be provided with a detailed list of logistics requirements needed to support the new configuration. Should you be awarded a contract, installation, overhaul, and repair manual updates/creation may also be required at time of First Article Test (FAT) for your contract.

n. QE-STD-1 Compliance: Quality Certification for each FSP (see Attachment X).

o. Test Plans: All proposed test plans necessary to completely manufacture the part must be submitted to for approval prior to beginning testing.

p. FAA/PMA Certification: An FAA/PMA Certification for the item which you have received from the FAA/PMA.

q. Testing to Validate Performance: Testing is done to validate the performance of the item after the test plans have been approved. Test requirements are part specific and are included in the Spares Technical Data Package, Appendix A. Test requirements are also available from the point of contact for SARs.

r. SOURCE APPROVAL REQUEST REQUIREMENTS BY CASL CATEGORY

REQUIREMENT	**CATEGORY (See definitions below)**							
	I	**II**	**III**	**IV**	**V(A)**	**V(B)**	**V(C)**	**VI**
6.a COVER LETTER	X	X	X	X	X	X	X	X
6.b QUAL PART DRAWINGS		X	X	X	X	X	X	X
6.c QUAL PART DETAILED MFG PLAN		X	X	X	X	X	X	X
6.d MASTER TOOLING CERTIFICATION		X	X	X	X	X	X	X
6.e DATA COLLECTION		X	X	X	X	X	X	X
6.f QUAL PART SUBKR/VENDOR LIST		X	X	X	X	X	X	X
6.g QUAL PART SHIPPING DOCS		X			X			
6.h EQUIV PART DRAWINGS			X			X		
6.i EQUIV PART SHIPPING DOCS			X			X		
6.j COMPARATIVE ANALYSIS			X			X		

6.k EQUIV PART DETAILED MFG PLAN			X			X		
6.l EQUIV PART SUBKR/VENDOR LIST			X			X		
6.m LOGISTICS SUPPORT DATA				X				X
6.n QE-STD-1 COMPLIANCE					X	X	X	
6.o TEST PLANS				X			X	
6.p FAA/PMA CERTIFICATION								X
6.q TESTING TO VALIDATE PERFORMANCE				X			X	

CATEGORY DEFINITIONS:

I. FULLY COMPETITIVE

II. ACTUAL MANUFACTURE (NON FSP)

III. EQUIVALENT MANUFACTURE (NON FSP)

IV. DEMONSTRATED ENGINEERING & MANUFACTURING CAPABILITY (NON FSP)

V(A). ACTUAL MANUFACTURER (FSP)

V(B). EQUIVALENT MANUFACTURER (FSP)

V(C). ENGINEERING TEST ITEMS (FSP)

VI. FAA/PMA

7. BUY OR BORROW (BOB) PROGRAM

The BOB Program is a non-solicited activity in which you are allowed to request and obtain sample parts managed by, if available. The sample parts must be used for design replication through Reverse Engineering (RE) methods, with the intent to submit subsequent offers to see the part to the Government. You should submit to your BOB request for managed parts. Parts managed by other agencies are not available through the BOB Program. Public Law restricts the BOB Program to domestic business concerns. Potential candidates for the BOB Program can be identified by the second position of the AMRC. Parts that have proprietary data can be identified by A, D, or P. Parts for which has incomplete manufacturing data or specifications can be identified by B or H. Items not normally eligible for the BOB Program have G, T, or Y in the AMRC. will review your request and determine if the item is eligible for release under the BOB Program and if it is available in the requested quantities.

If you wish to participate in the BOB Program, submit your request to:

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-MMC-RE-LL
Redstone Arsenal, AL 35898-5000
(256) 876-9192

FAX: (256) 842-6590

Your request must include:

a. The minimum and maximum number of samples you desire.

b. The number of spares you expect to destroy.

c. If the item is repairable, the extent of interchangeability you intend to achieve.

d. A statement that your firm will comply with all BOB Program requirements and guidelines.

If your request is approved for the BOB Program, you will be notified by letter. If you wish to purchase the parts at the price given in the approval letter, complete and sign the BOB Agreement enclosed with the letter, and return it along with your payment. We will then make the necessary shipping arrangements.

8. REVERSE ENGINEERING (RE) PROGRAM

The RE Program is for items in which you do not manufacture, but wish to reverse engineer at your own expense. These are parts which AMCOM does not have sufficient technical data or rights in data to create a competitive Spares Technical Data Package (STDP) and for which you do not have rights in data for direct sales to the Government or sufficient data to manufacture and test the part to OEM specifications. You can determine what data possesses by calling or writing the Technical Data Repository (see paragraph 9.c). Prototype parts may be required, and may have to undergo extensive testing, depending on the item and its application. Your entire RE effort, including ALL testing, must be accomplished at your expense. For any item you reverse engineer, prepare and submit your SAR package under CASL Category IV. Your RE activity is illegal if you have or have had access to any proprietary data which would aid RE, manufacture, or testing of the item.

The RE Program is for Non-Flight Safety Parts.

STEP I -- INFORMATION ON SAMPLES: Identify the following:

a. How and where you obtained your samples.

b. The quantity of samples available to you for RE.

c. If the item is repairable, the extent of interchangeability you intend to achieve.

STEP II -- COMPLETION OF INITIAL RE EFFORT AND INITIAL STDP:

Submit the following:

a. Draft reverse engineered technical data.

b. Certifications for required master tooling.

c. A draft Proposed Manufacturing Plan (PMP).

d. Draft provisioning data (for repairable items NOT 100% interchangeable to lowest provisioned piece part level).

e. Draft RE Test Plan.

NOTE: Prototype testing cannot begin until after AMCOM approves the Test Plan.

STEP III -- FINALIZED STDP AND PROTOTYPE TESTING:

Submit the following:

a. Finalized Level III STDP.

b. Finalized Proposed Manufacturing Plan.

c. Finalized provisioning documentation, if required.

d. Upon completion of the tests required in the approved RE Test Plan, a Test Report will be prepared and submitted for each test.

NOTE 1 - The item cannot be approved until AMCOM approves the final test report.

NOTE 2 - If you have completed your RE process prior to contacting AMCOM, your SAR must include all requirements of Steps I through III above, with the following exceptions:

a. No draft technical data, plans, or reports are allowed. You must submit finalized documentation.

b. You must obtain AMCOM requirements for provisioning your item and comply with them, prior to approval of any repairable item that does not demonstrate 100% interchangeability with the OEM item down to the lowest provisioned piece part level.

c. If AMCOM does not approve either your Test Plan or your Test Report(s), your item must be re-tested, at your expense, to the AMCOM approved test requirements.

9. USEFUL INFORMATION

a. To order technical manuals (for which a fee may be assessed) contact:

Customer Service
National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
1-800-553-6847 or (703) 605-6000 / Fax (703) 605-6900
http://www.ntis.gov/ordering.htm

b. If you wish to order Government published specifications, forms, and similar publications (other than technical manuals), contact:

Defense Printing Services Detachment Office
Bldg. 4, Section D
700 Robbins Ave.
Philadelphia, PA 19111-5094
(215) 697-2179
http://www.access.gpo.gov

c. If you wish to obtain technical data (drawings, specifications, STDPs) from AMCOM and you (i) are a U.S. citizen, (ii) are a potential supplier to the U.S. Government, (iii) have a CAGE code, and (iv) intend to do specific business with AMCOM, contact the Technical Data Repository at the following address:

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-CIC-ED-MI

Redstone Arsenal, AL 35898-5000
(256) 876-1614 / Fax (256) 842-9885

NOTE 1 - Only non-proprietary data can be provided by AMCOM.

NOTE 2 - A fee will be assessed for technical data.

NOTE 3 - It is recommended that you contact the Repository prior to ordering data. The Specialist will advise you on the availability, releaseability, and cost of the particular data you desire.

d. To obtain copies of DMWRs, AMCOM procurement history, or information on Freedom of Information Act (FOIA) procedures, contact the AMCOM Public Affairs Office. Your request must be made under the FOIA. A fee may be required for the requested document(s).

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-CIC-BM-MP
Redstone Arsenal, AL 35898-5000
(256) 313-3255 / Fax (256) 876-2057

NOTE- Procurement history is available on the AMCOM Acquisition home page. The address is:
www.redstone.army.mil/acquisition/procbbs/

e. Non-U.S. firms wishing to obtain technical data from must send their requests for data through their own Embassies, who in turn will forward the requests to the U.S. State Department for processing.

f. If you do not presently have a CAGE code and you would like to obtain one, you can either FAX a properly completed DD Form 2051 to (616) 961-4388 or (616) 961-4528; or contact either your local Procurement Technical Assistance Center or Electronic Commerce Resource Center for assistance.

g. In all cases, AMCOM recommends that you follow the Commerce Business Daily (CBD), the official publication in which AMCOM and other Government agencies advertise their upcoming procurements. For information about the CBD, contact:

Superintendent of Documents
Government Printing Office
Washington, DC 24042
(202) 512-1800 / Fax (202) 512-2250
http://www.cbdnet.gpo.gov

h. A two-part microfiche listing which translates CAGE code to company name and address, and company name to CAGE code is available from the following. Yearly subscriptions and single issues are available for a fee.

U.S. Government Printing Office
ATTN: Subscription Dept.
Washington, DC 20402-9371
(202) 512-1800 / Fax (202) 512-2250

i. If you would like assistance from the AMCOM Small and Disadvantaged Business Utilization Office, contact:

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-SB
Redstone Arsenal, AL 35898-5000

(256) 876-5441 / Fax (256) 842-0085

j. Information on FACNET registration and participation is available by calling 1-800-EDI-3414 or http://www.acq.osd.mil/ec.

The point of contact for EC/EDI at AMCOM is Ms. Debbie Childress at (256) 876-5076.

k. Additional helpful Internet addresses include:

DA home page: http://acqnet.sarda.army.mil
AMC home page: http://www.dtic.dla.mil/amc/
AMCOM home page: http://www.redstone.army.mil/
FSP/NST data base: http://avrdec1.stl.army.mil/FSP/fspnst.html

ATTACHMENT I

Acquisition Method Reason Codes (AMRCs)

The AMRC is a two digit alpha-numeric code, which indicates how the part is to be acquired by the Government, (i.e., fully competitive, sole source, or limited competition). The AMRC will help you determine what is necessary for you to become a potential supplier of the part. For example, a part coded 1G or 2G requires you to submit a Standard Form 129; whereas a part coded 3B, 1C, 2C or 3C requires a SAR package to be submitted.

FIRST POSITION:

1. Suitable for competitive acquisition for the second or subsequent time (see Notes 1 and 2).

2. Suitable for competitive acquisition for the first time (see Notes 1 and 2).

3. Acquire, for the second or subsequent time, directly from the actual manufacturer.

4. Acquire for the first time, directly from the actual manufacturer.

5. Acquire directly from a sole source contractor, which is not the actual manufacturer.

NOTE 1: Potential sources may include dealers/distributors.

NOTE 2: If sources are limited to the prime contractor and a subcontractor, a competitive code is not assigned unless both sources are expected to compete independently for contracts for the part.

SECOND POSITION:

A - The Government's right to use data in its possession is questionable.

B - Acquisition of this part is restricted to source(s) specified on "Source Control," "Altered Item," or "Selected Item" drawings/documents.

C - This part requires engineering source approval by the design control activity in order to maintain the quality of the part. An alternate source must qualify in accordance with the appropriate SAR procedure.

D - The data or rights to use the data needed to purchase this part from additional sources are not owned by the Government and it has been determined that it is uneconomical to purchase them.

G - The Government has unlimited rights to the technical data, and the data package is complete.

H - The Government physically does not have in its possession sufficient, accurate, or legible data to purchase this part from other than the current source(s).

K - This part must be produced from class 1 castings and similar type forgings as approved (controlled) by procedures contained in the current version of MIL-STD-2175.

L - The annual buy value of this part falls below the screening threshold established by DoD Components and field activities.

M - Master or coordinated tooling is required to produce this part. This tooling is not owned by the Government, or, where owned, cannot be made available to other sources.

N - Manufacture of the part requires special test and/or inspection facilities to determine and maintain ultra-precision quality for its function or system integrity.

P - The rights to use the data needed to purchase this part from additional sources are not owned by the Government and cannot be purchased.

Q - The data or rights to use the data needed to purchase this part from additional sources remains unresolved for more than a year, but action is still on-going to attempt resolution.

R - The Government does not own the data or the rights to the data needed to purchase this part from additional sources.

S - The production of this item involves unclassified but sensitive military technology and sources must be restricted.

T - Acquisition of this part is controlled by Qualified Products List (QPL) procedures.

U - The cost to the Government to breakout this part and acquire it competitively has been determined to exceed the projected savings over the life span of the part.

V - This part has been designated a high reliability part under a formal reliability program.

Y - The design of this part is unstable. Engineering, manufacturing, or performance characteristics indicate that the required design objectives have not been achieved. Major changes are contemplated because the part has a low process yield or has demonstrated marginal performance during tests or service use. These changes will render the present part obsolete and unusable in its present configuration. Limited acquisition from the present source is anticipated pending configuration changes.

Z - This part is a commercial/non-developmental/off-the-shelf item.

ATTACHMENT II

If you do not presently have a CAGE code and you would like to obtain one, you can either Fax a properly completed DD Form 2051 to (616) 961-4388 or (616) 961-4528; or contact either your local Procurement technical Assistance Center or electronic Resource Center for assistance.

ATTACHMENT III

TECHNICAL DATA RIGHTS CERTIFICATION

I am an officer and employee of the above named legal entity with the responsibility for investigating the facts upon which this certification is made.

To the best of my knowledge and information obtained from my recent investigation:

a. I believe and certify that the technical data submitted to the U.S. Army Aviation and Missile Command (AMCOM), Huntsville, Alabama, as a part of my company's request for approval as a potential source for the purpose of obtaining a contract, were obtained by legal means by my company, its current or recent

employees; and

b. I believe and certify that my company, its current or recent employees, did not obtain or receive any technical data marked with a company's proprietary rights legend or a government limited rights legend from any U.S. Government agency or employee or other third parties that were used in the preparation of or were incorporated into the request for approval or its supporting technical data other than as described herein; and

c. I certify that my company has the legal right to use said technical data to manufacture the below identified part for the United States Government. To the extent that said technical data are marked with a company's proprietary rights or a Government limited rights legend or are otherwise believed to be or have in the past been the proprietary data of another company, the following documents which are attached hereto and made a part of this certification have formed the basis for claim to use said technical data.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

INSTRUCTIONS:

1. Place certification on company stationery.
2. List documents pertaining to certification.
3. Date, sign, and state signer's title.

POLICY CONCERNING USE OF TECHNICAL DATA BY CONTRACTORS

1. It is U.S. Department of Defense (DOD) policy that limited rights technical data or a company's proprietary data should not be released outside the Government without the written consent of the owner.

2. If a potential source submits technical data to the U.S. Army Aviation and Missile Command (AMCOM) for source approval purposes, or to an AMCOM contracting officer for the purposes of meeting responsibility, qualification, or performance requirements, the technical data will be reviewed for ownership and the right to use as set forth below.

3. The Technical Data Rights Certification must be executed prior to source approval and/or the award of the contract. The Source Approval Officer and/or the contracting officer has the responsibility to review the certification and insure that the certification and any documents attached thereto support the contractor's legal right to use all technical data required in the performance of the contract. If it is determined that the submitter is the owner or otherwise has a legal right to use the technical data, nothing else will be done.

4. However, the existence of the following requires that the Technical Data Rights Certification be reviewed by the AMCOM Legal Office prior to source approval and/or award of the contract:

a. The technical data bears in the title block the name of someone other than the submitter; or

b. A second party states that the technical data is owned by him and that the submitter does not have a legal right to use the data; or

c. Government personnel otherwise have a suspicion that the submitter does not have a legal right to use the technical data. One example is when the submitter's data is compared with data in the AMCOM Repository, the Repository data has limited rights, and/or the submitter's copy appears to have been

tampered with by alterations to the title block or the proprietary markings.

ATTACHMENT IV
WEAPON SYSTEMS AND THEIR MANAGERS

Weapon Systems	Weapon System Manager
- Supplemental Restraint Systems - CABS - JCABS - IBAHRS - Air Warrior	Project Manager Aircrew Integrated Systems ATTN: SFAE-AV-LSE Redstone Arsenal, Al 35898-5150 (256) 313-4300 / Fax (256) 313-4346
- Avionics - Aircraft Survivability Equipment	Project Manager Aviation Electronic Combat ATTN: SFAE-AV-AEC Redstone Arsenal, Al 35898-5150 (256) 313-4376 / Fax (256) 313-4537
- AH-64A - AH-64D (Apache Longbow) - TADS/PNVS - Simulation Trainers - Fire Control Radar (FCR) - RDI	Project Manager Apache Attack Helicopter ATTN: SFAE-AV-AAH Redstone Arsenal, Al 35898-5150 (256) 313-4200 / Fax (256) 313-4147
- Infrared Warning Systems	Project Manager ATIRCM/CMWS ATTN: SFAE-AV-SIIRCM Redstone Arsenal, Al 35898-5150 (256) 313-4652 / Fax (256) 313-4537
- CH-47D	Project Manager Cargo Helicopters ATTN: SFAE-AV-CH Redstone Arsenal, Al 35898-5150 (256) 313-4252 / Fax (256) 313-4348
- RAH-66 - T-800	Program Manager Comanche ATTN: SFAE-AV-RAH Redstone Arsenal, Al 35898-5150 (256) 313-0846 / Fax (256) 313-4544

- AGSE - Air Traffic - Fixed Wing - MPIM/SRAW - Scout Attack - Shorads/Sentinel - Smart Weapons Mgt Ofc - TMDE - UGV - Utility Helicopters	DSA Commander Deputy for Systems Acquisition ATTN: SFAE-DSA-C Redstone Arsenal, AL 35898-5150 (256) 842-2842 / Fax (256) 955-0043
- Foreign Military Sales (FMS)	Commander U.S. Army Aviation and Missile Command Security Assistance Management Office ATTN: AMSAM-SA Redstone Arsenal, AL 35898-5150 (256) 313-6908 / Fax (256) 313-6624

ATTACHMENT V

AVIATION TECHNICAL MANUALS

AIRCRAFT ENGINES	
T53-L-11/13	TM55-2840-229-23P
T53-L-703	TM55-2840-247-23P
T55-L-712	TM55-2840-254-23P
T55-L-7/7B/7C/11A/11ASA/110	TM55-2840-234-23P
T62-T-2B	TM55-2835-205-23P
T62-2A/2A1/16A1/16A	TM55-2835-203-23P
T63-A-5A/700	TM55-2840-231-23P
T63A-720	TM55-2840-241-23P

T700	TM55-2840-248-23P
T701	TM55-2840-238-23P
T701C	TM55-2840-258-23P
T703-AD-700	TM55-2840-256-23P

AIRCRAFT AIRFRAMES	
AH-64	TM55-1520-238-23P-1, -2,-3, -4, -5
AH-1S	TM55-1520-236-23P-1, -2,-3 (PROD, ECAS, COV MC)
CH-47D	TM55-1520-240-23P-1, -2,-3, -4
OH-58A, C	TM55-1520-228-23P
OH-58D	TM55-1520-248-23P
UH-1	TM55-1520-210-23P-1, -2,-3
UH-60	TM55-1520-237-23P-1, -2,-3, -4, -5

SUBSYSTEMS	
Mast Mounted Sight Subsystem	TM9-1240-778-23P
TADS/PNVS	TM1-1270-476-23P TM9-8145-476-23P TM11-5855-265-23P TM11-6625-3081-23P

ATTACHMENT VI

FEDERAL SUPPLY CLASSES (FSCs)

GROUP 10 WEAPONS

1010 Guns, over 30mm up to 75mm
1080 Camouflage Sets and Deception Equipment
1090 Assemblies Interchangeable Between Weapons in Two or More Classes
1095 Storage Rack, Small Arms

GROUP 12 FIRE CONTROL EQUIPMENT

1240 Optical Sighting & Ranging Equipment
1260 Fire Control Designating & Indicating Equipment

1270 Aircraft Gunnery Fire Control Components
1290 Miscellaneous Fire Control Equipment

GROUP 13 AMMUNITION AND EXPLOSIVES

1345 Land Mines
1377 Cartridge & Propellant Devices & Components

GROUP 15 AIRCRAFT AND AIRFRAME STRUCTURAL COMPONENTS

1560 Airframe Structural Components

GROUP 16 AIRCRAFT COMPONENTS AND ACCESSORIES

1610 Aircraft Propellers
1615 Helicopter Rotor Blades, Drive Mechanisms & Components
1620 Aircraft Landing Gear Components
1630 Aircraft Wheel & Brake Systems
1650 Aircraft Hydraulic, Vacuum & De-Icing System Components
1660 Aircraft Air Conditioning, Heating & Pressurizing Equipment
1670 Parachutes; Aerial Pickup, Delivery & Recovery Systems; Cargo Tie-Down Equipment
1680 Miscellaneous Aircraft Accessories & Components

GROUP 17 AIRCRAFT LAUNCHING, LANDING AND GROUND HANDLING EQUIPMENT

1730 Aircraft Ground Servicing Equipment
1740 Airfield Specialized Trucks & Trailers

GROUP 19 SHIPS, SMALL CRAFT, PONTOONS AND FLOATING DOCKS

1905 Combat Ships & Landing Vessels
1915 Cargo & Tanker Vessels
1925 Special Service Vessels
1930 Barges & Lighters, Cargo
1935 Barges & Lighters, Special Purpose
1940 Small Craft
1945 Pontoons & Floating Docks
1990 Miscellaneous Vessels

GROUP 20 SHIPS AND MARINE EQUIPMENT

2010 Ship & Boat Propulsion Components
2020 Rigging & Rigging Gear
2030 Desk Machinery
2040 Marine Hardware & Hull Stems
2050 Buoys
2090 Miscellaneous Ships & Hull Systems

GROUP 22 RAILWAY EQUIPMENT

2210 Locomotives
2220 Rail Cars
2230 Right-Of-Way Construction Maintenance Equipment, Railroad
2240 Locomotive & Rail Car Accessories & Components

GROUP 23 GROUND VEHICLES, MOTOR VEHICLES, TRAILERS, CYCLES

2305 Ground Effect Vehicles
2320 Trucks & Truck Tractors
2330 Trailers
2350 Tanks & Self-Propelled Weapons

GROUP 25 VEHICULAR EQUIPMENT COMPONENTS

2510 Vehicular Cab, Body & Frame Structural Components
2520 Vehicular Power Transmission Components
2530 Vehicular Brake, Steering, Axle, Wheel & Track Components
2540 Vehicular Furniture & Accessories
2590 Miscellaneous Vehicular Components

GROUP 28 ENGINES, TURBINES AND COMPONENTS

2805 Gasoline Reciprocating Engines, Except Aircraft & Components
2810 Gasoline Reciprocating Engines, Aircraft & Components
2815 Diesel Engines & Components
2825 Steam Turbines & Components
2840 Gas Turbines & Jet Engines, Aircraft & Components

GROUP 29 ENGINE ACCESSORIES

2910 Engine Fuel System Components, Non-Aircraft
2915 Engine Fuel System Components, Aircraft
2920 Engine Electrical System Components, Non-Aircraft
2925 Engine Electrical System Components, Aircraft
2930 Engine Cooling System Components, Non-Aircraft
2935 Engine Cooling System Components, Aircraft
2940 Engine Air & Oil Filters, Strainers & Cleaners, Non-Aircraft
2945 Engine Air & Oil Filters, Strainers & Cleaners, Aircraft
2990 Miscellaneous Engine Accessories, Non-Aircraft
2995 Miscellaneous Engine Accessories, Aircraft

GROUP 30 MECHANICAL POWER TRANSMISSION EQUIPMENT

3010 Torque Converters & Speed Changers
3020 Gears, Pulleys, Sprockets & Transmission Chains
3030 Belting, Drive Belts, Fan Belts & Accessories
3040 Miscellaneous Power Transmission Equipment

GROUP 31 BEARINGS

3110 Bearings, Anti-Friction, Unmounted
3120 Bearings, Plain, Unmounted
3130 Bearings, Mounted

GROUP 32 WOODWORKING MACHINERY AND EQUIPMENT

3210 Sawmill & Planing Mill Machinery
3220 Woodworking Machines

GROUP 34 METALWORKING MACHINERY

3405 Saws & Filing Machines
3415 Grinding Machines
3419 Miscellaneous Machine Tools
3424 Metal Heat Treating Equipment
3433 Gas Welding, Heat Cutting & Metalizing Equipment
3441 Bending & Forming Machines
3442 Hydraulic & Pneumatic Presses, Power Driven
3446 Forging Machinery & Hammers
3449 Miscellaneous Secondary Metal Forming & Cutting Machines
3455 Cutting Tools for Machine Tools
3456 Cutting & Forming Tools for Secondary Metalworking Machinery
3460 Machine Tool Accessories

GROUP 35 SERVICE AND TRADE EQUIPMENT

3510 Laundry & Dry Cleaning Equipment
3520 Shoe Repairing Equipment
3530 Industrial Sewing Machines & Bookbinding Equipment
3540 Wrapping & Packaging Machinery
3590 Miscellaneous Service & Trade Equipment

GROUP 36 SPECIAL INDUSTRY MACHINERY

3610 Printing, Duplicating & Bookbinding Equipment
3615 Pulp & Paper Industries Machinery
3620 Rubber & Plastics Working Machinery
3635 Crystal & Glass Industries Machinery
3655 Gas Generating & Dispensing System, Fixed or Mobile
3660 Industrial Size Reduction Machinery
3680 Foundry Machinery, Related Equipment & Supplies
3695 Miscellaneous Special Industry Machinery

GROUP 37 AGRICULTURAL MACHINERY AND EQUIPMENT

3710 Soil Preparation Equipment
3740 Pest, Disease & Frost Control Equipment
3770 Saddlery, Harness, Whips & Related Animal Furnishings

GROUP 38 CONSTRUCTION, MINING, EXCAVATING, AND HIGHWAY MAINTENANCE EQUIPMENT

3820 Mining, Rock Drilling, Earth Boring & Related Equipment
3835 Petroleum Production & Distribution Equipment
3895 Miscellaneous Construction Equipment

GROUP 39 MATERIALS HANDLING EQUIPMENT

3910 Conveyors
3920 Materials Handling Equipment, Nonself-Propelled
3930 Warehouse Trucks & Tractors, Self-Propelled
3940 Blocks, Tackle, Rigging & Slings
3950 Winches, Hoists, Cranes & Derricks
3990 Miscellaneous Materials Handling Equipment

GROUP 40 ROPE, CABLE AND FITTINGS

4010 Chain & Wire Rope
4020 Fiber Rope, Cordage & Twine
4030 Fittings for Rope, Cable & Chain

GROUP 41 REFRIGERATION, AIR CONDITIONING AND AIR CIRCULATING EQUIPMENT

4110 Refrigeration Equipment
4120 Air Conditioning Equipment
4130 Refrigeration & Air Conditioning Components
4140 Fans, Air Circulators & Blower Equipment

GROUP 42 FIRE FIGHTING, RESCUE AND SAFETY EQUIPMENT

4210 Fire Fighting Equipment
4220 Marine Lifesaving & Diving Equipment
4230 Decontaminating & Impregnating Equipment
4240 Safety & Rescue Equipment

GROUP 43 PUMPS AND COMPRESSORS

4310 Compressors & Vacuum Pumps
4320 Power & Hand Pumps
4330 Centrifugal, Separators & Pressure & Vacuum Filters

GROUP 44 FURNACE, STEAM PLANTS, DRYING EQUIPMENT & NUCLEAR REACTORS

4410 Industrial Boilers
4420 Heat Exchangers & Steam Condensers
4440 Dryers, Dehydrators & Anhydrators
4460 Air Purification Equipment

GROUP 45 PLUMBING, HEATING AND SANITATION EQUIPMENT

4510 Plumbing Fixtures & Accessories
4520 Space Heating Equipment & Domestic Water Heaters
4530 Fuel Burning Equipment Units
4540 Miscellaneous Plumbing, Heating & Sanitation Equipment

GROUP 46 WATER PURIFICATION AND SEWAGE TREATMENT EQUIPMENT

4610 Water Purification Equipment
4620 Water Distillation Equipment, Marine & Industrial
4630 Sewage Treatment Equipment

GROUP 47 PLUMBING, HEATING AND SANITATION EQUIPMENT

4710 Pipe & Tube
4720 Hose & Tubing, Flexible
4730 Fittings & Specialties; Hose, Pipe & Tube

GROUP 48 VALVES

4810 Valves, Powered
4820 Valves, Non-Powered

CLASS 49 MAINTENANCE AND REPAIR SHOP EQUIPMENT

4920 Aircraft Maintenance & Repair Shop Specialized Equipment
4925 Ammunition Maintenance & Repair Shop Specialized Equipment
4930 Lubrication & Fuel Dispensing Equipment
4940 Miscellaneous Maintenance & Repair Shop Specialized Equipment

GROUP 51 HAND TOOLS

5110 Hand Tools, Edged, Non-Powered
5120 Hand Tools, Non-Edged, Non-Powered
5130 Hand Tools, Power Driven
5133 Drill Bits, Counterbores & Countersinks; Hand & Machine
5136 Taps, Dies & Collets, Hand & Machine
5140 Tool & Hardware Boxes
5180 Sets, Kits & Outfits of Hand Tools

GROUP 52

5210 Measuring Tools, Craftsman's
5220 Inspection Gages & Precision Layout Tools

GROUP 53 HARDWARE AND ABRASIVES

5305 Screws
5306 Bolts
5307 Studs
5310 Nuts & Washers
5315 Nails, Keys & Pins
5320 Rivets
5325 Fastening Devices
5330 Packing & Gasket Materials
5335 Metal Screening
5340 Miscellaneous Hardware
5345 Disks & Stones, Abrasive
5355 Knobs & Pointers
5360 Coil, Flat & Wire Springs
5365 Rings, Shims & Spacers

GROUP 54 PREFABRICATED STRUCTURES AND SCAFFOLDING

5410 Prefabricated & Portable Buildings
5411 Rigid Wall Shelters
5420 Bridges, Fixed & Floating
5430 Storage Tanks
5445 Prefabricated Tower Structures
5450 Miscellaneous Prefabricated Structures

GROUP 56 CONSTRUCTION AND BUILDING MATERIALS

5610 Mineral Construction Materials, Bulk
5620 Building Glass, Tile, Brick & Block
5630 Pipe & Conduit, Nonmetallic
5640 Sound Controlling
5670 Architectural & Related Metal Products
5680 Miscellaneous Construction Materials

GROUP 58 COMMUNICATION, DETECTION AND COHERENT RADIATION EQUIPMENT

5815 Teletype & Facsimile Equipment
5820 Radio & Television Communication Equipment, Except Airborne
5821 Radio & Television Communication Equipment, Airborne
5826 Radio Navigation Equipment, Airborne
5830 Intercommunication & Public Address Systems, Except Airborne
5841 Radar Equipment, Airborne
5855 Night Vision Equipment, Emitted & Reflected Radiation

GROUP 59 ELECTRICAL AND ELECTRIC EQUIPMENT

5905 Resistors
5910 Capacitors
5915 Filters & Networks
5920 Fuses & Lighting Arresters
5925 Circuit Breakers
5930 Switches
5935 Connectors, Electrical
5940 Lugs, Terminals & Terminal Strips
5945 Relays & Solenoids
5950 Coils & Transformers
5955 Piezoelectric Crystals
5960 Electron Tubes & Associated Hardware
5961 Semiconductor Devices & Associated Hardware
5962 Micro-Circuits, Electronic
5965 Headsets, Handsets, Microphones & Speakers
5970 Electrical Insulators & Insulating Materials
5975 Electrical Hardware & Supplies
5977 Electrical Contact Brushes & Electrodes
5980 Optoelectronic Devices & Associated Hardware
5985 Antennas, Waveguides & Related Equipment
5990 Syncros & Resolvers
5995 Cable, Cord & Wire Assemblies
5998 Electrical & Electronic Assemblies, Boards, Cords & Associated Hardware
5999 Miscellaneous Electrical & Electronic Devices

GROUP 61 ELECTRICAL WIRE AND POWER DISTRIBUTION

6105 Motors, Electrical
6110 Electrical Control Equipment
6115 Generators & Generator Sets, Electrical
6120 Transformers, Distribution & Power Station
6125 Converters, Electrical, Rotating
6130 Converters, Electrical, Non-rotating
6135 Batteries, Non-Rechargeable
6140 Batteries, Rechargeable
6145 Wire & Cable, Electrical
6150 Miscellaneous Electric Power & Distributing Equipment

GROUP 62 LIGHTING FIXTURES AND LAMPS

6210 Indoor & Outdoor Electric Lighting Fixtures
6220 Electric Vehicular Lights & Fixtures

6230 Electric Portable & Hand Lighting Equipment
6240 Electric Lamps
6250 Ballast, Lamp-Holders & Starters
6260 Nonelectrical Lighting Fixtures

GROUP 63 ALARM AND SIGNAL SYSTEMS

6340 Aircraft Alarm & Signal Systems
6350 Miscellaneous Alarm, Signal & Security Detection Systems

GROUP 66 INSTRUMENTS AND LABORATORY EQUIPMENT

6605 Navigation Instruments
6610 Flight Instruments
6615 Automatic Pilot Mechanisms & Airborne Gyro Components
6620 Engine Instruments
6625 Electrical & Electronic Properties Measuring & Testing Instruments
6630 Chemical Analysis Instruments
6635 Physical Properties Testing Supplies
6640 Laboratory Equipment & Supplies
6645 Time Measuring Instruments
6650 Optical Instruments
6660 Meteorological Instruments & Apparatus
6665 Hazard Detecting Instruments & Apparatus
6670 Scales & Balances
6675 Drafting, Surveying & Mapping Instruments
6680 Liquid & Gas Flow, Liquid Level & Mechanical Motion Measuring Instruments
6685 Pressure, Temperature & Humidity Measuring & Controlling Instruments
6695 Combination & Miscellaneous Instruments

GROUP 67 PHOTOGRAPHIC EQUIPMENT

6720 Cameras, Still Picture
6740 Photographic Developing & Finishing Equipment
6750 Photographic Supplies
6760 Photographic Equipment & Accessories
6780 Photographic Sets, Kits & Outfits

GROUP 68 CHEMICAL AND CHEMICAL PRODUCTS

6810 Chemicals
6850 Miscellaneous Chemical Specialties

GROUP 69 TRAINING AIDS AND DEVICES

6910 Training Aids
6920 Armament Training Devices
6930 Operation Training Devices

GROUP 70

7025 ADP Input/Output & Storage Devices

GROUP 71 FURNITURE

7105 Household Furniture

7110 Office Furniture
7125 Cabinets, Lockers, Bins & Shelving
7195 Miscellaneous Furniture & Fixtures

GROUP 72 HOUSEHOLD AND COMMERCIAL FURNISHINGS AND APPLIANCES

7220 Floor Coverings
7230 Draperies, Awnings & Shades
7240 Household & Commercial Utility Containers

GROUP 73 FOOD PREPARATION AND SERVING EQUIPMENT

7310 Food Cooking, Baking & Serving Equipment
7320 Kitchen Equipment & Appliances
7330 Kitchen Hand Tools & Utensils
7360 Sets, Kits & Outfits: Food Preparation & Serving

GROUP 74 OFFICE MACHINES, VISIBLE RECORD EQUIPMENT AND DATA PROCESSING EQUIPMENT

7430 Typewriters & Office-Type Composing Machines
7450 Office-Type Sound Recording & Reproducing Machines
7460 Visible Record Equipment
7490 Miscellaneous Office Equipment

GROUP 75 OFFICE SUPPLIES AND DEVICES

7510 Office Supplies
7520 Office Devices & Accessories
7530 Stationery & Record Forms

GROUP 76 BOOKS, MAPS AND OTHER PUBLICATIONS

7610 Books & Pamphlets
7690 Miscellaneous Printed Matter

GROUP 78

7810 Athletic & Sporting Equipment

GROUP 79 CLEANING EQUIPMENT AND SUPPLIES

7920 Brooms, Brushes, Mops & Sponges

GROUP 80 BRUSHES, PAINTS, SEALERS AND ADHESIVES

8010 Paints, Dopes, Varnishes & Related Products
8020 Paint & Artists Brushes
8030 Preservative & Sealing Compound
8040 Adhesives

GROUP 81 CONTAINERS, PACKAGING AND PACKING SUPPLIES

8105 Bags & Sacks
8110 Drums & Cans
8115 Boxes, Cartons & Crates
8120 Commercial & Industrial Gas Cylinders

8125 Bottles & Jars
8130 Reels & Spools
8135 Packaging & Packing Bulk Materials
8140 Ammunition & Nuclear Ordnance Boxes, Packages & Special Containers
8145 Specialized Shipping & Storage Containers

GROUP 83

8340 Tents & Tarpaulins
8345 Flags & Pennants

GROUP 84 CLOTHING, INDIVIDUAL EQUIPMENT AND INSIGNIA

8415 Clothing, Special Purpose
8465 Individual Equipment
8475 Specialized Flight Clothing & Accessories

GROUP 85

8530 Personal Toiletry Articles

GROUP 88 LIVE ANIMALS

8820 Live Animals, Not Raised for Food

GROUP 93 NONMETALLIC CRUDE MATERIALS

9320 Rubber Fabricated Materials
9330 Plastic Fabricated Materials
9340 Glass Fabricated Materials
9390 Miscellaneous Fabricated Non-Metallic Materials

GROUP 95 METAL BARS, SHEETS AND SHAPES

9510 Bars and Rods, Iron & Steel
9515 Plate, Sheet, Strip & Foil Iron & Steel
9520 Structural Shapes, Iron & Steel
9540 Structural Shapes, Nonferrous Base Metal

GROUP 99 MISCELLANEOUS

9905 Signs, Advertising Displays, Identification Plated
9999 Miscellaneous Items

ATTACHMENT VII

CLASSES OF NSNs TRANSFERRED TO DEFENSE LOGISTICS AGENCY (DLA)

Over the past several years, many items have been or scheduled to be transferred from to the Defense Logistics Agency. The following lists indicate the Federal Supply Classes (FSCs) where items have transferred from to a DLA agency.

DEFENSE CONSTRUCTION SUPPLY CENTER (DCSC)
ATTN: DCSC-OSEC/CUSTOMER SERVICE
PO BOX 3990
COLUMBUS OH 43216-5000
(614) 692-3191 or -2271

Some items from the following Federal Supply Classes have transferred to DCSC:

1025 1730 2590 2940 3805 3960 4520 4930
1030 1740 2620 2990 3810 4210 4530 4940
1035 2010 2805 3010 3815 4220 4540 5410
1095 2230 2815 3020 3820 4310 4610 5411
1450 2240 2820 3030 3825 4320 4620 5420
1610 2250 2825 3040 3830 4330 4630 5430
1615 2410 2830 3710 3835 4410 4710 5440
1620 2420 2850 3720 3895 4420 4720 5445
1630 2430 2895 3730 3910 4430 4730 5450
1650 2510 2910 3740 3915 4440 4810 5510
1710 2530 2920 3760 3930 4460 4820 5520
1720 2540 2930 3770 3950 4510 4910 5530
5660

DEFENSE ELECTRONICS SUPPLY CENTER (DESC)
ATTN: DESC-OSEC/CUSTOMER SERVICE
1507 WILMINGTON PIKE
DAYTON OH 45444-5000
(513) 296-6161

Some items from the following FEDERAL SUPPLY CLASSES were transferred to DESC:

1210 1290 5815 5841 5920 6963 6030 7030
1220 1420 5820 5845 5925 5965 6060 7035
1240 1430 5821 5850 5930 5980 6070 7040
1250 1440 5825 5855 5935 5985 6080 7042
1260 1660 5826 5860 5945 5990 6625 7045
1265 4931 5830 5865 5950 5998 7010 7050
1270 4935 5831 5895 5955 5999 7020 1280
5805 5835 5905 5960 6010 7021 1285 5810
5836 5910 5961 6015 7022 1287 5811 5840
5915 5962 6020 7025

DEFENSE GENERAL SUPPLY CENTER (DGSC)
ATTN: DGSC-0SCC/CUSTOMER SERVICE
RICHMOND VA 23297-3000
(804) 279-4865

Some items from the following FEDERAL SUPPLY CLASSES were transferred to DGSC:

1075 3412 3448 3660 5220 6260 6730 7670
1080 3413 3449 3670 5280 6310 6740 7690
1090 3414 3450 3680 5355 6320 6750 8110
1560 3415 3455 3685 5940 6330 6760 8120
1670 3416 3456 3690 5970 6340 6770 8125
1680 3417 3460 3693 5975 6350 6780 8130
1820 3418 3461 3694 5977 6605 6810 8140
1830 3419 3465 3695 5995 6610 6820 8145
1840 3422 3470 3920 6105 6615 6830 9110
1850 3424 3510 3940 6110 6620 6840 9150
1860 3426 3520 3990 6115 6635 6850 9160
2020 3431 3530 4110 6116 6636 6910 9320

2030 3432 3605 4120 6117 6645 6920 9330
2040 3433 3610 4130 6120 6650 6930 9340
2050 3436 3611 4140 6125 6655 6940 9350
2060 3438 3615 4230 6130 6660 7310 9390
2090 3439 3620 4240 6135 6665 7320 9440
3210 3441 3625 4920 6140 6670 7360 9450
3220 3442 3630 4921 6150 6675 7450 9925
3230 3443 3635 4923 6210 6680 7610 9930
3405 3444 3640 4925 6220 6685 7630 9999
3408 3445 3645 4927 6230 6695 7640 3410
3446 3650 4933 6240 6710 7650 3411 3447
3655 4960 6250 6720 7660

DEFENSE INDUSTRIAL SUPPLY CENTER (DISC)
ATTN: DISC-OCEC/CUSTOMER SERVICE 700 ROBBINS AVE
PHILADELPHIA PA 19111-5096
(215) 697-2336

Some items from the following FEDERAL SUPPLY CLASSES were transferred to DISC:

1560 2840 2995 5305 5330 9510 9545 9670
1670 2845 3110 5306 5335 9515 9610 9680
1680 2915 3120 5307 5340 9520 9620 2020
2925 3130 5310 5360 9525 9630 2030 2935
4010 5315 5365 9530 9640 2810 2945 4020
5320 6145 9535 9650 2835 2950 4030 5325
9505 9540 9660

DEFENSE PERSONNEL SUPPORT CENTER (DPSC)
ATTN: DPSC-MOAB (CHRIS FALLS)
2800 SOUTH. 20th STREET
PHILADELPHIA, PA 19101
(215) 737-5470

Some items from the following FEDERAL SUPPLY CLASSES were transferred to DPSC:

6630 6640

ATTACHMENT VIII

ARMY COMPETITION MANAGEMENT OFFICES

Any firm may contact the appropriate Competition Advocate's Office to discuss competition policy or CASL related issues.

Army Competition Advocate General
U.S. Army Contracting Support Agency
ATTN: SAAL-ZP
103 Army Pentagon
Washington, DC 20310-0103
(703) 695-2488 / Fax (703) 614-9505
e-mail: oscark@sarda.army.mil

Headquarters
Commander
U.S. Army Materiel Command (AMC)

ATTN: AMCRDA-AP
5001 Eisenhower Ave.
Alexandria, VA 22333-0001
(703) 617-8262 / Fax (703) 617-0152

Commander
US Army Industrial Operations Command (IOC)
ATTN: AMSIO-BR
Rock Island, IL 612900-6000
(309) 782-1611 / Fax (309) 782-8469

Commander
US Army Aviation and Missile Command ()
ATTN: AMSAM-CM
Redstone Arsenal, AL 35898-5150
(256) 876-9699 / Fax (256) 876-2045

Commander
US Army Communications Electronics Command (CECOM)
ATTN: AMSEL-CM
Fort Monmouth, NJ 07703-5026
(908) 532-5056 / Fax (908) 532-8970

Commander
US Army Tank Automotive Command (TACOM)
ATTN: AMSTA-IM-Y
Warren, MI 48397-5000
(810) 574-6597 / Fax (810) 574-5020

Commander
US Army Research Laboratory (ARL)
ATTN: AMSRL-OP-PR
2800 Powder Mill Road
Adelphi, MD 20783-1145
(301) 394-3880 / Fax (301)394-4784

Commander
US Army Soldiers System Command (SSCOM)
ATTN: AMSSC-ADC
Kansas Street
Natick, MA 01760-5011
(508) 233-5160 / Fax (508) 233-5286

Defense Logistics Agency Competition Advocate General (DLA)
(703) 767-1395 / Fax (703) 767-1545

ATTACHMENT IX

Form A
CERTIFICATION OF COMPLIANCE

I do hereby certify that I have personal knowledge of (insert firm's name) Quality Control Procedures, and that these procedures comply with the U.S. Army Aviation and Missile Command's (AMCOM's) Quality Engineering Standard One (QE-STD-1), Revision C.

Type Name and Signature

of Authorized Firm Representative

Title of Authorized Firm
Representative

Date Signed

Form B

CERTIFICATION OF COMPLIANCE

I do hereby certify that I have personal knowledge of (insert firm's name) Quality Control Procedures, and that at the present time, these procedures fall short of compliance with the U.S. Army Aviation and Missile Command's (AMCOM's) Quality Engineering Standard One (QE-STD 1), Revision C. However, in-house efforts are striving to bring (insert firm's name)'s Quality Control Procedures into compliance with AMCOM's QE-STD-1. The projected dates for compliance of all areas of QE-STD-1 are listed below.

Projected Date of Compliance
(enter MET if already in compliance) MIL-Q-9858

3.1 Organization	_____
3.2 Initial Quality Planning	_____
3.3 Work Instructions	_____
5.1 Responsibility	_____
5.2 Purchasing Data	_____
6.1 Materials and Materials Control	_____
6.2 Production Processing and Fabrication	_____
6.4 Handling, Storage and Delivery	_____

MIL-I-45208 - All Paragraphs
QE-STD-1 - All Paragraphs

Type Name and Signature
of Authorized Firm Representative

Title of Authorized Firm Representative

Date Signed

FLIGHT SAFETY PARTS
CRITICAL CHARACTERISTICS
NEW MANUFACTURE
QE-STD 1
REVISION D – SEP 98

Retention of Records	6.4.3
Variability Reduction Methods	6.5
Certification of Personnel	6.6
Measurement & Test Equipment	6.7
Calibration	6.7.1
Tolerance	6.7.2
Serialization	6.8

1.0 PURPOSE: To establish the minimum level of activity that is required to manufacture Flight Safety Parts (FSPs) containing Critical Characteristics (CCs). Requirements established herein are intended to establish and maintain the integrity of the CCs throughout the manufacturing process.

2.0 SCOPE: This document is intended to be used in conjunction with other contractually specified quality requirements. This document will apply to all FSPs.

3.0 REFERENCES: ANSI/ASQC B1,B2,B3-1996 Control Charts
ISO 10012-1 Quality Assurance Requirements for Measuring Equipment

4.0 DEFINITIONS:

a. Flight Safety Part: Any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause loss of or serious damage to the aircraft, or serious injury or death to the occupants.

b. Critical Characteristic: Any feature throughout the life cycle of a FSP, such as dimension, finish, material or assembly, manufacturing or inspection process, installation, operation, field maintenance, or depot overhaul requirement which if nonconforming, missing or degraded could cause the failure or malfunction of the FSP.

c. Qualified Source: A company or vendor which has produced a Flight Safety Part that has successfully complied with all engineering testing requirements (e.g. fatigue, endurance, interchangeability, etc.) applicable to those parts.

d. Approved source: Any company or vendor that has previously manufactured a specific FSP or a similar part and is recognized by AMCOM Engineering as a source for future procurements.

5.0 POLICY: AMCOM will only buy Flight Safety Parts from qualified sources or approved sources. To maintain continuity between the performance of FSP engineering testing and the actual production of FSP parts, components, sub-assemblies, and assemblies, AMCOM requires that FSP suppliers adhere to the requirements of this document in its entirety. If a contractor has difficulty in maintaining process control (as evident through such things as internal management audits, external customer audits, the receipt of quality deficiency reports for parts previously supplied to AMCOM et. al.), this will result in immediate corrective action for the current contract and could affect the award of future contracts to that supplier. If a contractor has not produced a certain FSP or a similar item for an extended period of time (usually five years) that contractor may be subject to re-certification by means of an audit to determine if all

processes are in control. This is necessary to establish whether AMCOM can continue to consider that contractor as a qualified source. Determination of the status of a particular source is at the discretion of AMCOM's Directorate for Engineering. Should retest be deemed necessary to regain qualified status, the cost of such testing shall be at the contractor's expense.

6.0 REQUIREMENTS: All requirements of this document (paras. 6.1-6.8) shall be complied with by a supplier receiving a contract to produce FSP parts. Any process that involves a CC that is subcontracted requires this document to be imposed in its entirety on the subcontractor performing the work.

6.1 MANUFACTURING PLANNING:

6.1.1 PLAN CONTENT: All manufacturing, assembly and inspection points shall be controlled by detailed procedures outlining each step or parameter of the process along with any materials, tooling, equipment, environmental control, and operator certification required that leads to the specific production of an end item. All process plans shall clearly define sequence of operation, machine type and accept/reject limits for the specific process or operation. Critical processes not easily verified by subsequent inspection shall clearly define the process operating parameters with tolerances. Plans shall clearly identify all CCs. Accompanying the plan shall be a method for documenting configuration management.

6.1.2 PLAN SCOPE: The contractor is responsible for developing manufacturing planning. Review and control of these plans will be the responsibility of the contractor's control board (CB) consisting of qualified personnel equipped with adequate resources to assure development of complete, reliable and traceable documentation. Parts manufactured utilizing these plans shall meet all contractual requirements. Plans developed for FSPs shall be considered frozen at the time the First Article Test Report (FATR) is approved by the Government, or when FAT is not required, at start of production. Submittal of the frozen planning to AMCOM is required at the time of the FAT or the start of production in case FAT is not required. The copy furnished to AMCOM will be in accordance with contractual requirements. All plans shall be made available to the Government upon request.

6.1.3 CHANGES TO FROZEN PLANNING: The portion of the frozen manufacturing plan pertaining to a CC shall not be changed without prior CB recommendation, justification to AMCOM and receipt of Procurement Contracting Officer (PCO) approval. Changes not affecting CCs or occurring as the result of an AMCOM approved Engineering Change Proposal (ECP), require CB approval only. All changes to frozen planning affecting CCs will be submitted to AMCOM. When the item, CC, or process is produced by a subcontractor, the planning shall be reviewed and approved by the contractor, and be subject to the same restrictions as above.

6.2 AUDITS: It is required that contractors perform onsite audits of their subcontractors' frozen planning whenever a CC is involved. These audits are to be performed during initial production. Audits shall be done annually unless there is an extended gap in production in which case an audit will be done upon resumption of production. If a subcontractor is performing the same process for more than one part, an audit will not be necessary for each part as long as there is confidence of compliance. Contractors are to perform self audits of their own frozen planning when that planning applies to CCs produced in-house. These audits will be done at the time of initial production and annually unless there is a break in production. All audit findings will be recorded, and corrective action will be documented.

6.3 CRITICAL CHARACTERISTICS:

6.3.1 INSPECTION OF CRITICAL CHARACTERISTICS: All CCs, which can be nondestructively inspected/tested, shall be subjected to 100% inspection by the contractor or subcontractor. CCs which require destructive testing are to be tested on a lot or batch basis, with no skip lots allowed. All inspection records shall identify the FSP part number, serial or lot number, and features inspected. CCs shall be identified on the inspection records in such a manner as to draw attention to them. Inspection records shall reflect the exact readings or dimensions, date of inspection, identity of inspector and any required inspection certification. These requirements are in addition to other contractual requirements.

6.3.2 NONCONFORMING CRITICAL CHARACTERISTICS: Nonconformances of CCs shall not be dispositioned "use as is" or "repair" through contractor action. However, rework to print is acceptable. Waivers or deviations may be requested as specified in the contract. Request for waivers/deviations of CCs shall be classified as critical and will be forwarded to AMCOM for consideration.

6.3.3 CONTRADICTORY CRITICAL CHARACTERISTICS: Contradictions between the AMCOM FSP Spares Technical Data Package (STDP) list of CCs and the drawing/specifications shall not be resolved by the order of precedence paragraph in the STDP. The contractor shall notify AMCOM immediately and any work pertaining to the CC in question shall be stopped until a written resolution to the contradiction is issued to the contractor from the PCO.

6.3.4 DELIVERED NONCONFORMANCES: Contractors shall notify the PCO immediately of any discovered nonconformances that may exist in previously delivered FSPs. Notification is required whether or not the characteristic in question has been classified as a CC. Notification shall include a description of the suspected nonconformance, contract number, part number and affected serial numbers or lot numbers, when applicable.

6.4 RECORDS:

6.4.1 TRACEABILITY OF RECORDS: All records relating to FSPs shall be traceable to the date and place of production. Records shall provide the degree of traceability required to enable subsequent verification of all aspects of material, manufacture, special process, personnel certification, variability control charts (if applicable), assembly and inspection of CCs. Special processes include but are not limited to heat treat, shot peening and nondestructive testing.

6.4.2 PURCHASING RECORDS: All purchase orders for subcontracted products or processes that contain CCs must clearly identify the CC and reference this document for compliance. All documents and referenced data for FSPs shall be available for review by the Government to determine compliance.

6.4.3 RETENTION OF RECORDS: The contractor shall retain at its facility copies of all records for at least five years past the completion of the contract and shall make these documents available to the Government upon request. At the end of this period or in the event of relocation or shutdown, all records shall be offered to the PCO prior to disposal.

6.5 VARIABILITY REDUCTION METHODS: As an alternative to the 100% inspection of CCs required by paragraph 6.3.1, the contractor may implement a Statistical Process Control (SPC) program. Once the program demonstrates that the critical processes are statistically in-control, stable and capable, the contractor may submit to the PCO for approval its documentation with a request to suspend 100% inspection. This approval authority may be delegated to the Defense Contract Management Command (DCMC) by the PCO in which case notification will be provided upon any approval or suspension of SPC. At the Government's discretion 100% inspection may be reinstated if the process controls prove inadequate.

6.6 CERTIFICATION OF PERSONNEL: Contractor personnel performing work or having inspection responsibilities pertaining to CCs, shall be certified to the appropriate professional level as outlined in the applicable national standards, best commercial practices, or as contractually required. A system for tracking personnel certification shall be an element in the contractor internal audit program to assure all certifications are maintained in a current status.

6.7 MEASUREMENT & TEST EQUIPMENT (M&TE):

6.7.1 CALIBRATION: Calibration of M&TE shall be in accordance with contractual requirements. All aspects of the supplier's calibration confirmation system shall be subject to Government verification at unscheduled intervals. The supplier's M&TE shall be made available for use by the Government representative, as needed. All measuring equipment that is used to measure CCs shall be monitored for

effectiveness and repeatability. A recommended method is provided in ISO 10012-1.

6.7.2 TOLERANCE: M&TE used to inspect FSPs must be discriminate to within ten percent of the total tolerance spread for the feature being inspected except as follows: for total tolerance spreads of less than .001, M&TE must be discriminate to twenty percent of the spread.

6.8 SERIALIZATION: All FSPs require individual serialization or identification by lot number for traceability. AMCOM manages this through the Serial Number Assignment Program (SNAP). The contractor shall request either approval of or assignment of a block of serial numbers (S/Ns) by AMCOM. Serialization shall occur so that any individualized inspection/process that involves a CC is traceable to a specific S/N. All S/Ns approved for issue or provided by AMCOM shall be accounted for; this includes material scrapped during manufacturing. S/Ns used in this program shall not be used on any other part manufactured by that contractor. Reporting of S/Ns to SNAP shall be in accordance with contractual requirements.

ATTACHMENT X

RECOVERABILITY CODES

Code	Explanation
Z	Non reparable item. When unserviceable, condemn and dispose at the level authorized to replace the item.
O	Reparable item. When uneconomically reparable, condemn and dispose at the organizational level.
F	Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.
H	Reparable item. When uneconomically reparable, condemn and dispose at the General Support Level.
D	Reparable item. When beyond lower level repair capability, return to the depot. Condemnation and disposal not authorized below depot level.
L	Reparable item. Repair, condemnation and disposal not authorized below depot/specialized repair activity level.
A	Item requires special handling or condemnation procedures due to specific reasons. Refer to appropriate manuals/directives for specific instructions.

ATTACHMENT XI

ENGINEERING TEST REQUIREMENTS FOR NEW SOURCES
TEST-STD-1, Revision B
SEP 98

1. SCOPE. This document establishes the minimum Engineering Test requirements and procedures to be followed for FSP and items with Engineering Test requirements. This document is applicable to parts requiring engineering testing.

2. APPLICABLE DOCUMENTS.

2.1. Government Documents.

ISO 10012-1 Quality Assurance Requirements for Measuring Equipment

ANSI Z540-10002 General Requirements for Calibration Laboratories, Measuring, and Test Equipment

DI-NDTI-80566 Test Plan

DI-DRPR-80651 Engineering Drawings

DI-NDTI-80809A Test/Inspection Reports

3.0 Requirements.

3.1 Test Plans. The test shall be conducted in accordance with an RDEC Engineering Directorate approved test plan. The test plan shall detail all activities to test the component, including specific test and inspection equipment, pre-test and post-test inspection procedures, and actual test procedures. The test plan shall include drawings of the test fixture and test instrumentation. Where Endurance or Interchangeability testing is required, validated test fixtures will be used. Test fixture drawings may be eliminated with RDEC Engineering Directorate approval. If there is any variation from an RDEC Engineering Directorate approved test plan, or one does not exist, the tester shall submit a test plan prepared in accordance with data item DI-NDTI-80566.

3.1.1 Fixture Drawings. Test fixture drawing shall be prepared in accordance with data item DI-DRPR-80651.

3.1.2 Instrumentation Drawings. Instrumentation drawing shall be prepared in accordance with data item DI-DRPR-80651. The drawing shall call out and locate, by dimensions, all instrumentation devices on the test article. Instrumentation shall be provided that allows determination of the appropriate load levels to insure that test conditions are maintained within acceptable limits.

3.2 pre Test Setup. RDEC Engineering Directorate may audit the test setup and test execution. The tester shall contact RDEC Engineering Directorate when the test setup and test initiation are to occur. A minimum of one week advance notification is required. In any event, the test shall not proceed without approval of RDEC Engineering Directorate.

3.2.1 Instrumentation Selection. The tester shall select the type and location of instrumentation necessary to monitor test loads and strains. The location of instrumentation for each test specimen shall provide for direct correlation to each part's respective existing S/N or performance curve. The tester shall use test instrumentation that meets or exceeds an accuracy of 1 percent of full scale for both mean and alternating parameters. All crack detection devices shall be considered test instrumentation.

3.2.2 Data Monitoring and Recording. The tester shall use a feedback control system that maintains test conditions to within 2 percent and is in current calibration in accordance with ISO 10012-1 or ANSI Z540-10002. Both load and stroke control capacity are required. Testing shall be stopped if test constraints are exceeded. The tester shall be capable of providing continuous monitoring of test parameters. Channel sampling rate shall be sufficient to determine the mean and alternating parameters within 1 percent of full scale. Tests that involve spectrum loading will require data to be recorded a minimum of one time per each load block of the load spectrum. Load cycles must be counted. Calibration constants and zero offsets shall be recorded prior to the beginning of testing and during the test at an interval sufficient to maintain data integrity. Data for Endurance and Interchangeability such as duration, number of starts/stops, temperatures and other data types defined in the test plan must be recorded from calibrated equipment as defined above. Raw data shall be recorded during the actual test and converted to engineering units by use of appropriate computer software. Data shall be recorded on

removable media.

3.2.3 Test Articles. Each component/assembly test shall require a minimum of two specimens to evaluate the component/assembly under test. If the test fixture has not previously been approved by RDEC Engineering Directorate, the tester shall be required to validate the test fixture utilizing two additional specimens from a previously qualified source. In the case where no previously qualified source parts exist, six specimens from the alternate source vendor shall be tested to failure. The number of test articles for Endurance and Interchangeability testing will be specified by the Engineering Directorate.

3.3 Test. The tester shall conduct the actual testing in accordance with the RDEC Engineering Directorate approved test plan. A FLASH report in accordance with data item DI-NDTI-80809A W/ ADDENDUM shall be submitted to the contracting officer within 24 hours of a test specimen failure. The tester shall conduct a post-test metallurgical analysis to determine cause and mode of failure. The metallurgical analysis shall include determination of fatigue crack initiation sites, description of anomalies, if any, at the crack initiation sites, and fractographic evidence of the fatigue failure.

3.3.4 Test Report. The tester shall submit a test report in accordance with data item DI-NDTI-80809A W/ ADDENDUM within 30 days of completion of the test. The test report shall document the actual test procedure utilized and the load levels applied. The test report shall also document the post-test inspections utilized to determine fatigue origin site(s). The test report shall include photographs and/or fractographs of the failure surface for each failed test specimen. Each test specimen shall be photographed at the completion of the test. All photo documentation shall be 7x11 inch prints (no photocopies) and shall be part of the test report. For those photographs and/or fractographs of the failure surface, they shall be of a magnification that clearly identifies the failure origin site.

3.4 Test Article Disposition.

3.4.1 Test Article Passes Test. If the part is acceptable it shall be returned to the contractor, only if the part has not been procured by the Government. If the part has been procured by the Government, disposition of the part shall be in accordance with instructions from the contracting officer. All parts used for fatigue or endurance test shall be permanently marked as test specimens to prevent their use as replacement spares on aircraft.

3.4.2 Test Article Fails Test. If the part fails the test and has not been purchased by the Government, it shall be returned to the contractor with an explanation of the failure. If the part has been procured by the Government, disposition of the part shall be in accordance with instructions from the contracting officer. The contractor will be notified of the status of the testing upon completion of all required analysis. If the contractor desires to be re-tested, it is incumbent on the contractor to revise his tooling, processes, etc., and produce a new part for testing at his expense.